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January 27, 2017

VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Fuel Report
Docket No. 2006-176-E**

Dear Mrs. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is Duke Energy Progress, LLC's Monthly Fuel Report in Docket No. 2006-176-E for the month of December 2016.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803-988-7130.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rebecca Dulin", written in a cursive style.

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff
Mr. Jeffrey M. Nelson, Office of Regulatory Staff
Ms. Shannon Bowyer Hudson, Office of Regulatory Staff
Ms. Nanette Edwards, Office of Regulatory Staff
Michael Seaman-Huynh, Office of Regulatory Staff
Ms. Heather Shirley Smith, Duke Energy
Mr. Scott Elliott, Elliott & Elliott, P.A.
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC
Mr. Gary Walsh, Walsh Consulting, LLC

**Duke Energy Progress
Summary of Monthly Fuel Report**

Schedule 1

Line No.	Item	December 2016
1	Fuel and Fuel-related Costs excluding DERP incremental costs	\$ 131,724,909
	MWH sales:	5,164,309
2	Total System Sales	262,238
3	Less intersystem sales	<u>4,902,071</u>
4	Total sales less intersystem sales	<u>2.6871</u>
5	Total fuel and fuel-related costs (¢/KWH) (Line 1/Line 4)	<u>2.3748</u>
6	Current fuel & fuel-related cost component (¢/KWH) (per Schedule 4)	<u>2.3748</u>
	Generation Mix (MWH):	
	Fossil (By Primary Fuel Type):	
7	Coal	650,554
8	Oil	14,996
9	Natural Gas - Combustion Turbine	67,364
10	Natural Gas - Combined Cycle	1,795,682
11	Total Fossil	<u>2,528,595</u>
12	Nuclear	2,697,981
13	Hydro - Conventional	16,795
14	Solar Distributed Generation	12,393
15	Total MWH generation	<u>5,255,764</u>

Note: Detail amounts may not add to totals shown due to rounding.

Line 1 includes an adjustment of \$2,335,257 to true up January through November 2016. Details are located in the notes section of Schedule 4.

**Duke Energy Progress
Details of Fuel and Fuel-Related Costs**

Description	December 2016
Fuel and Fuel-Related Costs:	
Steam Generation - Account 501	
0501110 coal consumed - steam	20,340,092
0501310 fuel oil consumed - steam	663,682
Total Steam Generation - Account 501	<u>21,003,774</u>
Nuclear Generation - Account 518	
0518100 burnup of owned fuel	20,412,766
0518600 - Disposal Cost	-
Total Nuclear Generation - Account 518	<u>20,412,766</u>
Other Generation - Account 547	
0547000 natural gas consumed - Combustion Turbine	3,249,747
0547000 natural gas consumed - Combined Cycle	59,279,940
0547200 fuel oil consumed	2,107,014
Total Other Generation - Account 547	<u>64,636,701</u>
Purchased Power and Net Interchange - Account 555	
Fuel and fuel-related component of purchased power	27,688,884
PURPA purchased power capacity	3,580,464
Total Purchased Power and Net Interchange - Account 555	<u>31,269,348</u>
Less fuel and fuel-related costs recovered through intersystem sales - Account 447	6,840,488
Total Costs Included in Base Fuel Component	\$ 130,482,101
Environmental Costs	
0509030, 0509212, 0557451 emission allowance expense	\$ 1,907
0502020, 0502030, 0502040, 0502080, 0502090, 0548020 reagents expense	1,204,076
Emission Allowance Gains	(11,814)
Less reagents expense recovered through intersystem sales - Account 447	(51,847)
Less emissions expense recovered through intersystem sales - Account 447	3,207
Total Costs Included in Environmental Component	1,242,808
Fuel and Fuel-related Costs excluding DERP incremental costs	<u>\$ 131,724,909</u>
DERP Incremental Costs	86,615
Total Fuel and Fuel-related Costs	<u>\$ 131,811,524</u>

Notes: Detail amounts may not add to totals shown due to rounding.

 0518100 burnup of owned fuel includes an adjustment of \$2,335,257 to true up January through November 2016. Details are located in the notes section of Schedule 4.

**DUKE ENERGY PROGRESS
PURCHASED POWER AND INTERCHANGE
SOUTH CAROLINA**

DECEMBER 2016

**Schedule 3, Purchases
Page 1 of 2**

Purchased Power	Total	Capacity	Non-capacity		
Marketers, Utilities, Other	\$	\$	mWh	Fuel \$	Non-fuel \$
Broad River Energy, LLC.	\$ 2,383,949	\$ 1,719,616	8,969	\$ 664,333	-
City of Fayetteville	757,916	715,000	101	42,916	-
Haywood EMC	29,650	29,650	-	-	-
NCEMC	3,728,353	3,162,145	11,061	566,208	-
PJM Interconnection, LLC.	310,707	-	11,130	310,707	-
Smurfit Stone Container Corp	10,996	-	293	10,996	-
Southern Company Services	5,329,353	1,621,620	100,542	3,707,733	-
DE Carolinas - Native Load Transfer	6,878,789	-	218,737	6,878,955	\$ (166)
DE Carolinas - Native Load Transfer Benefit	165,346	-	-	165,346	-
DE Carolinas - Fees	145,420	-	-	145,420	-
Generation Imbalance	11,988		369	7,313	4,675
	\$ 19,752,467	\$ 7,248,031	351,202	\$ 12,499,927	\$ 4,509
Act 236 PURPA Purchases					
Renewable Energy	15,998,913	-	231,520	15,998,913	-
Other Qualifying Facilities	2,770,508	-	40,376	2,770,508	-
	\$ 18,769,421	\$ -	271,896	\$ 18,769,421	\$ -
Total Purchased Power	\$ 38,521,888	\$ 7,248,031	623,098	\$ 31,269,348	\$ 4,509

NOTE: Detail amounts may not add to totals shown due to rounding.

DUKE ENERGY PROGRESS
 INTERSYSTEM SALES*
 SOUTH CAROLINA

DECEMBER 2016

Schedule 3, Sales
 Page 2 of 2

	Total	Capacity	Non-capacity		
Sales	\$	\$	mWh	Fuel \$	Non-fuel \$
Market Based:					
NCEMC Purchase Power Agreement	\$ 985,409	652,500	8,530	\$ 311,985	\$ 20,924
PJM Interconnection, LLC.	1,899	-	70	2,268	(369)
Other:					
DE Carolinas - Native Load Transfer Benefit	\$ 113,150	-	-	\$ 113,150	\$ -
DE Carolinas - Native Load Transfer	6,534,915	-	253,611	6,364,435	170,480
Generation Imbalance	10	-	27	10	-
Total Intersystem Sales	\$ 7,635,383	\$ 652,500	262,238	\$ 6,791,848	\$ 191,035

* Sales for resale other than native load priority.

NOTE: Detail amounts may not add to totals shown due to rounding.

Duke Energy Progress
Over / (Under) Recovery of Fuel Costs
December 2016

Schedule 4
Page 1 of 2

Line No.			Total Residential	General Service Non-Demand	Demand	Lighting	Total
1	Actual System kWh sales	Input					4,902,071,380
2	DERP Net Metered kWh generation	Input					36,991
3	Adjusted System kWh sales	L1 + L2					4,902,108,371
4	Actual S.C. Retail kWh sales	Input	173,998,457	21,404,108	241,184,183	7,186,949	443,773,697
5	DERP Net Metered kWh generation	Input	31,843	5,148	-		36,991
6	Adjusted S.C. Retail kWh sales	L4 + L5	174,030,300	21,409,256	241,184,183	7,186,949	443,810,688
7	Actual S.C. Demand units (kw)	L32 / 31b *100			623,167		
Base fuel component of recovery - non-capacity							
8	Incurred System base fuel - non-capacity expense	Input					\$124,566,379
9	Eliminate avoided fuel benefit of S.C. net metering	Input					\$1,217
10	Adjusted Incurred System base fuel - non-capacity expense	L8 + L9					\$124,567,596
11	Adjusted Incurred System base fuel - non-capacity rate (¢/kWh)	L10 / L3 * 100					2.541
12	S.C. Retail portion of adjusted incurred system expense	L6 * L11 / 100	\$4,422,288	\$544,031	\$6,128,737	\$182,628	\$11,277,684
13	Assign 100 % of Avoided Fuel Benefit of S.C net metering	Input	(\$717)	(\$69)	(\$431)	\$0	(\$1,217)
14	S.C. Retail portion of incurred system expense	L12 + L13	\$4,421,571	\$543,962	\$6,128,306	\$182,628	\$11,276,467
15	Billed base fuel - non-capacity rate (¢/kWh) - Note 1	Input	2.230	2.229	2.229	2.229	2.229
16	Billed base fuel - non-capacity revenue	L4 * L15 /100	\$3,879,961	\$477,098	\$5,375,995	\$160,197	\$9,893,251
17	DERP NEM incentive - fuel component	Input	(\$170)	(\$16)	(\$102)	\$0	(\$289)
18	Adjusted S.C. billed base fuel - non-capacity revenue	L16 + L17	\$3,879,791	\$477,081	\$5,375,893	\$160,197	\$9,892,962
19	S.C. base fuel - non-capacity over/(under) recovery	L18 - L14	(\$541,780)	(\$66,880)	(\$752,413)	(\$22,431)	(\$1,383,504)
20	Adjustment - Note 2a	Input	\$ (74,472)	\$ (11,394)	\$ (151,541)	\$ (3,576)	(\$240,983)
21	Total S.C. base fuel - non-capacity over/(under) recovery	L19 + L20	(\$616,252)	(\$78,274)	(\$903,954)	(\$26,007)	(\$1,624,487)
Base fuel component of recovery - capacity							
22a	Incurred base fuel - capacity rates by class (¢/kWh)	L23 / L4 * 100	0.110	0.086			
22b	Incurred base fuel - capacity rate (¢/kW)	L23 / L7 * 100			18		
23	Incurred S.C. base fuel - capacity expense	Input	\$190,887	\$18,486	\$114,759		\$324,132
24a	Billed base fuel - capacity rates by class (¢/kWh)	Input	0.181	0.128			
24b	Billed base fuel - capacity rate (¢/kW)	Input			30		
25	Billed S.C. base fuel - capacity revenue	L24a * L4 /100	\$314,405	\$27,397	\$ 186,949	\$0	\$528,751
26	S.C. base fuel - capacity over/(under) recovery	L25 - L23	\$123,518	\$8,911	\$72,190	\$0	\$204,619
27	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
28	Total S.C. base fuel - capacity over/(under) recovery	L26 + L27	\$123,518	\$8,911	\$72,190	\$0	\$204,619
Environmental component of recovery							
29a	Incurred environmental rates by class (¢/kWh)	L30 / L4 * 100	0.038	0.030			
29b	Incurred environmental rate (¢/kW)	L30 / L7 * 100			6		
30	Incurred S.C. environmental expense	Input	\$66,258	\$6,417	\$39,834		\$112,509
31a	Billed environmental rates by class (¢/kWh)	Input	0.042	0.031			
31b	Billed environmental rate (¢/kW)	Input			6		
32	Billed S.C. environmental revenue	L31a * L4 /100	\$72,555	\$6,635	\$ 37,390		\$116,580
33	S.C. environmental over/(under) recovery	L32 - L30	\$6,297	\$218	\$(2,444)	\$0	\$4,071
34	Adjustment	Input	\$0	\$0	\$0	\$0	\$0
35	Total S.C. environmental over/(under) recovery	L33 + L34	\$6,297	\$218	\$(2,444)	\$0	\$4,071
36	Total over / (under) recovery	L21 + L28 + L35	(\$486,437)	(\$69,145)	(\$834,208)	(\$26,007)	(\$1,415,797)

Duke Energy Progress
Over / (Under) Recovery of Fuel Costs
December 2016

Schedule 4
Page 2 of 2

Year 2016-2017								
Cumulative over / (under) recovery	Cumulative	Total Residential	General Service Non-Demand	Demand	Lighting	Subtotal	Prior Period Adjustments	Total
Balance ending February 2016	(8,178,450)							
March 2016 - actual	(5,113,937)	\$1,257,169	\$149,823	\$1,614,366	\$43,155	\$3,064,513	\$0	\$3,064,513
_/2 April 2016 - actual	(2,862,055)	\$579,097	\$91,208	\$1,546,143	\$35,434	\$2,251,882	\$0	\$2,251,882
May 2016 - actual	(2,055,487)	\$166,326	\$33,470	\$597,607	\$9,165	\$806,568	\$0	\$806,568
_/2 June 2016 - actual	(1,637,768)	\$134,334	\$21,348	\$171,533	\$18,077	\$345,292	\$72,427	\$417,719
July 2016 - actual	(4,666,718)	(\$1,099,935)	(\$153,840)	(\$1,737,737)	(\$37,438)	(\$3,028,950)	\$0	(\$3,028,950)
August 2016 - actual	(6,588,776)	(\$647,989)	(\$90,105)	(\$1,162,202)	(\$21,762)	(\$1,922,058)	\$0	(\$1,922,058)
September 2016 - actual	(6,774,119)	(\$78,301)	(\$4,082)	(\$101,162)	(\$1,798)	(\$185,343)	\$0	(\$185,343)
October 2016 - actual	(7,344,031)	(\$175,489)	(\$21,964)	(\$362,824)	(\$9,635)	(\$569,912)	\$0	(\$569,912)
November 2016 - actual	(7,418,007)	\$25,549	\$877	(\$94,569)	(\$5,833)	(\$73,976)	\$0	(\$73,976)
_/2a December 2016 - actual	(8,833,804)	(\$486,437)	(\$69,145)	(\$834,208)	(\$26,007)	(\$1,415,797)	\$0	(\$1,415,797)
_/3 January 2017 - forecast	(9,319,244)	(\$119,152)	(\$27,759)	(\$331,170)	(\$7,359)	(\$485,440)	\$0	(\$485,440)
_/3 February 2017 - forecast	(9,200,917)	\$125,504	(\$3,574)	(\$4,891)	\$1,288	\$118,327	\$0	\$118,327
_/3 March 2017 - forecast	(10,759,271)	(\$531,676)	(\$66,272)	(\$936,870)	(\$23,536)	(\$1,558,354)	\$0	(\$1,558,354)
_/3 April 2017 - forecast	(10,870,815)	(\$72,639)	(\$5,669)	(\$32,736)	(\$500)	(\$111,544)	\$0	(\$111,544)
_/3 May 2017 - forecast	(10,949,942)	(\$74,333)	(\$1,815)	(\$2,970)	(\$9)	(\$79,127)	\$0	(\$79,127)
_/3 June 2017 - forecast	(11,982,058)	(\$365,194)	(\$46,752)	(\$604,790)	(\$15,380)	(\$1,032,116)	\$0	(\$1,032,116)

Line No.			Residential	Commercial	Industrial	Total
Distributed Energy Resource Program component of recovery: incremental costs						
37	Incurred S.C. DERP incremental expense	Input	\$51,009	\$22,396	\$13,210	\$86,615
38	Billed S.C. DERP incremental rates by account (\$/account)	Input	0.35	0.70	62.56	
39	Billed S.C. DERP incremental revenue	Input	\$46,071	\$21,637	\$15,179	\$82,887
40	S.C. DERP incremental over/(under) recovery	L39 - L37	(\$4,938)	(\$759)	\$1,969	(\$3,728)
41	Adjustment	Input	\$0	\$0	\$0	\$0
42	Total S.C. DERP incremental over/(under) recovery	L40 + L41	(\$4,938)	(\$759)	\$1,969	(\$3,728)

Year 2016-2017							
Cumulative over / (under) recovery	Cumulative	Residential	Commercial	Industrial	Subtotal	Prior Period Adjustments	Total
Balance ending February 2016	(409,036)						
March 2016 - actual	(332,983)	\$47,587	\$24,676	\$3,790	\$76,053	\$0	\$76,053
_/2 April 2016 - actual	(239,880)	\$57,498	\$29,093	\$6,512	\$93,103	\$0	\$93,103
May 2016 - actual	(230,645)	\$8,264	\$7,454	(\$6,483)	\$9,235	\$0	\$9,235
June 2016 - actual	(363,127)	(\$75,641)	(\$29,326)	(\$27,515)	(\$132,482)	\$0	(\$132,482)
July 2016 - actual	(227,737)	\$76,605	\$35,021	\$23,764	\$135,390	\$0	\$135,390
August 2016 - actual	(230,217)	(\$5,161)	(\$836)	\$3,517	(\$2,480)	\$0	(\$2,480)
September 2016 - actual	(236,229)	(\$6,705)	(\$1,534)	\$2,227	(\$6,012)	\$0	(\$6,012)
October 2016 - actual	(239,973)	(\$5,679)	(\$1,069)	\$3,004	(\$3,744)	\$0	(\$3,744)
November 2016 - actual	(248,310)	(\$7,741)	(\$2,004)	\$1,408	(\$8,337)	\$0	(\$8,337)
December 2016 - actual	(252,038)	(\$4,938)	(\$759)	\$1,969	(\$3,728)	\$0	(\$3,728)
_/3 January 2017 - forecast	(275,190)	(\$16,182)	(\$7,199)	\$229	(\$23,152)	\$0	(\$23,152)
_/3 February 2017 - forecast	(309,025)	(\$22,437)	(\$9,984)	(\$1,414)	(\$33,835)	\$0	(\$33,835)
_/3 March 2017 - forecast	(335,378)	(\$17,927)	(\$8,064)	(\$362)	(\$26,353)	\$0	(\$26,353)
_/3 April 2017 - forecast	(373,994)	(\$25,149)	(\$11,266)	(\$2,201)	(\$38,616)	\$0	(\$38,616)
_/3 May 2017 - forecast	(422,103)	(\$30,728)	(\$13,695)	(\$3,686)	(\$48,109)	\$0	(\$48,109)
_/3 June 2017 - forecast	(482,487)	(\$37,938)	(\$16,871)	(\$5,575)	(\$60,384)	\$0	(\$60,384)

Notes:

Detail amounts may not recalculate due to percentages presented as rounded.

_/1 Total residential billed fuel rate is a composite rate reflecting the approved residential rate of 2.246 and RECD 5% discount.

_/2 Includes prior period adjustments.

_/2a Prior period adjustments above true up nuclear fuel expense for January - November 2016. The monthly details are shown below.

	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Total Adj
Burned Nuclear Fuel Expense - Revised	\$ 9,085,819.08	\$ 6,684,732.13	\$ 5,089,875.10	\$ 8,779,345.13	\$ 9,224,564.94	\$ 9,006,202.93	\$ 9,320,241.26	\$ 9,291,565.36	\$ 8,929,727.09	\$ 8,932,694.74	\$ 9,028,389.87	\$ 93,373,157.63
Burned Nuclear Fuel Expense - Originally Reported	\$ 8,845,618.39	\$ 6,850,261.28	\$ 4,992,385.67	\$ 8,576,132.72	\$ 8,945,864.29	\$ 8,734,759.48	\$ 9,038,197.84	\$ 9,010,251.72	\$ 8,660,809.27	\$ 8,661,338.48	\$ 8,722,281.22	\$ 91,037,900.36

_/3 Forecast amounts based on low end of range of expected fuel rates.

Duke Energy Progress
Fuel and Fuel Related Cost Report
December 2016

Schedule 5
Page 1 of 2

Description	Weatherspoon CT	Lee CC	Sutton CC/CT	Robinson Nuclear	Asheville Steam	Asheville CT	Roxboro Steam	Mayo Steam
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	\$3,269,300	-	\$23,771,758	\$12,568,474
Oil	154,833	-	-	(983)	1,492,747	-	441,162	178,948
Gas - CC	-	20,380,987	15,315,935	-	-	-	-	-
Gas - CT	24	-	-	-	-	185,971	-	-
Total	\$154,857	\$20,380,987	\$15,315,935	(\$983)	\$4,762,047	\$185,971	\$24,212,920	\$12,747,422
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	-	-	-	-	290.81	-	317.31	297.73
Oil	1,242.74	-	-	-	1,275.63	-	1,286.52	1,321.53
Gas - CC	-	465.91	520.85	-	-	-	-	-
Gas - CT	-	-	-	-	-	818.43	-	-
Weighted Average	1,242.92	465.91	520.85	-	383.66	818.43	321.72	301.01
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	\$3,186,210	-	\$13,568,564	\$3,585,318
Oil - CC	-	175,322	2,168	-	-	-	-	-
Oil - Steam/CT	28,548	-	-	-	75,796	1,475,660	382,009	205,877
Gas - CC	-	20,380,987	15,315,935	-	-	-	-	-
Gas - CT	24	-	-	-	-	185,971	-	-
Nuclear	-	-	-	3,901,579	-	-	-	-
Total	\$28,572	\$20,556,310	\$15,318,103	\$3,901,579	\$3,262,005	\$1,661,631	\$13,950,573	\$3,791,195
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	189.43	-	322.83	321.55
Oil - CC	-	1,790.04	1,947.55	-	-	-	-	-
Oil - Steam/CT	1,507.40	-	-	-	1,387.96	1,387.96	1,138.38	1,196.07
Gas - CC	-	465.91	520.85	-	-	-	-	-
Gas - CT	-	-	-	-	-	818.43	-	-
Nuclear	-	-	-	65.96	-	-	-	-
Weighted Average	1,508.64	468.87	520.91	65.96	193.31	1,287.67	329.29	334.84
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	2.15	-	3.35	3.67
Oil - CC	-	17.83	21.77	-	-	-	-	-
Oil - Steam/CT	150.25	-	-	-	15.72	19.56	11.71	13.64
Gas - CC	-	3.43	3.66	-	-	-	-	-
Gas - CT	-	-	-	-	-	12.77	-	-
Nuclear	-	-	-	0.66	-	-	-	-
Weighted Average	150.38	3.45	3.66	0.66	2.20	18.46	3.42	3.82
Burned MBTU's								
Coal	-	-	-	-	1,681,962	-	4,203,045	1,115,020
Oil - CC	-	9,794	111	-	-	-	-	-
Oil - Steam/CT	1,894	-	-	-	5,461	106,319	33,557	17,213
Gas - CC	-	4,374,436	2,940,542	-	-	-	-	-
Gas - CT	-	-	-	-	-	22,723	-	-
Nuclear	-	-	-	5,915,016	-	-	-	-
Total	1,894	4,384,230	2,940,653.31	5,915,016	1,687,423	129,041.61	4,236,603	1,132,233
Net Generation (mWh)								
Coal	-	-	-	-	148,016	-	404,746	97,792
Oil - CC	-	983	10	-	-	-	-	-
Oil - Steam/CT	19	-	(51)	-	482	7,544	3,261	1,510
Gas - CC	-	594,745	418,023	-	-	-	-	-
Gas - CT	-	-	-	-	-	1,456	-	-
Nuclear	-	-	-	590,377	-	-	-	-
Hydro (Total System)								
Solar (Total System)								
Total	19	595,728	417,982	590,377	148,498	9,000	408,007	99,302
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	-	-	\$115,477	\$50,674
Limestone	-	-	-	-	184,250	-	441,258	87,456
Re-emission Chemical	-	-	-	-	-	-	-	-
Sorbents	-	-	-	-	18,220	-	110,563	57,915
Urea	-	-	-	-	120,649	-	-	-
Total	-	-	-	-	323,118	-	667,298	196,045

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Cents/MBTU and cents/kWh are not computed when costs and/or net generation is negative.

Fuel cost information on this report does not reflect intercompany sharing of fuel-related merger savings between Duke Energy Carolinas and Duke Energy Progress.

Lee and Wayne oil burn is associated with inventory consumption shown on Schedule 6 for Wayne.

Brunswick includes prior period true ups of \$2,335,257 to Cost of Fuel Burned, 3,706,200 to Burned MBTU's and (23) mWh to Net Generation for January through November 2016. These adjustments flow to the resulting Average Cost of Fuel Burned and Cost of Generation calculations.

Duke Energy Progress
Fuel and Fuel Related Cost Report
December 2016

Schedule 5
Page 2 of 2

Description	Brunswick Nuclear	Blewett CT	Wayne County CT	Darlington CT	Smith Energy Complex CC/CT	Harris Nuclear	Current Month	Total 12 ME December 2016
Cost of Fuel Purchased (\$)								
Coal	-	-	-	-	-	-	\$39,609,532	\$362,643,038
Oil	25,591	-	-	-	509,097	(3,558)	2,797,837	14,119,457
Gas - CC	-	-	-	-	23,583,017	-	59,279,940	528,046,475
Gas - CT	-	-	244,722	108,475	2,710,556	-	3,249,747	148,249,458
Total	25,591	-	\$244,722	\$108,475	\$26,802,670	(3,558)	\$104,937,056	\$1,053,058,429
Average Cost of Fuel Purchased (¢/MBTU)								
Coal	-	-	-	-	-	-	308.55	316.17
Oil	1,884.46	-	-	-	1,239.84	-	1,273.30	1,057.71
Gas - CC	-	-	-	-	427.28	-	461.88	396.12
Gas - CT	-	-	341.43	415.45	415.03	-	420.08	345.02
Weighted Average	1,884.46	-	341.43	415.45	431.36	-	393.54	360.25
Cost of Fuel Burned (\$)								
Coal	-	-	-	-	-	-	\$20,340,092	\$394,686,440
Oil - CC	-	-	-	-	245	-	177,735	334,851
Oil - Steam/CT	-	-	222,147	202,498	426	-	2,592,961	15,910,735
Gas - CC	-	-	-	-	23,583,017	-	59,279,940	528,046,475
Gas - CT	-	-	244,722	108,475	2,710,556	-	3,249,747	148,249,458
Nuclear	11,623,926	-	-	-	-	4,887,260	20,412,766	196,415,200
Total	\$11,623,926	\$0	\$466,869	\$310,973	\$26,294,244	\$4,887,260	\$106,053,240	\$1,283,643,159
Average Cost of Fuel Burned (¢/MBTU)								
Coal	-	-	-	-	-	-	290.57	322.60
Oil - CC	-	-	-	-	1,666.87	-	1,791.63	1,838.89
Oil - Steam/CT	-	-	1,799.70	1,771.64	1,661.67	-	1,377.46	1,314.88
Gas - CC	-	-	-	-	427.28	-	461.88	396.12
Gas - CT	-	-	341.43	415.45	415.03	-	420.08	345.02
Nuclear	63.95	-	-	-	-	65.45	64.68	63.72
Weighted Average	63.95	-	555.67	828.38	425.99	65.45	202.53	211.10
Average Cost of Generation (¢/kWh)								
Coal	-	-	-	-	-	-	3.13	3.41
Oil - CC	-	-	-	-	24.50	-	17.88	40.82
Oil - Steam/CT	-	-	27.33	41.61	19.10	-	18.52	17.27
Gas - CC	-	-	-	-	3.01	-	3.30	2.81
Gas - CT	-	-	4.12	6.12	4.66	-	4.82	3.88
Nuclear	0.84	-	-	-	-	0.68	0.76	0.67
Weighted Average	0.84	-	6.91	13.77	3.13	0.68	2.02	2.00
Burned MBTU's								
Coal	-	-	-	-	-	-	7,000,028	122,345,321
Oil - CC	-	-	-	-	15	-	9,920	18,209
Oil - Steam/CT	-	-	12,344	11,430	26	-	188,243	1,210,050
Gas - CC	-	-	-	-	5,519,388	-	12,834,366	133,306,293
Gas - CT	-	-	71,675	26,110	653,100	-	773,608	42,968,734
Nuclear	18,177,079	-	-	-	-	7,467,127	31,559,222	308,233,097
Total	18,177,079	-	84,019	37,540	6,172,528	7,467,127	52,365,387	608,081,704
Net Generation (mWh)								
Coal	-	-	-	-	-	-	650,554	11,573,079
Oil - CC	-	-	-	-	1	-	994	820
Oil - Steam/CT	-	(65)	813	487	2	-	14,002	92,143
Gas - CC	-	-	-	-	782,914	-	1,795,682	18,805,573
Gas - CT	-	-	5,941	1,772	58,194	-	67,364	3,817,026
Nuclear	1,384,499	-	-	-	-	723,105	2,697,981	29,333,963
Hydro (Total System)							16,795	489,905
Solar (Total System)							12,393	176,511
Total	1,384,499	(65)	6,754	2,259	841,111	723,105	5,255,764	64,289,021
Cost of Reagents Consumed (\$)								
Ammonia	-	-	-	-	\$17,614	-	\$183,766	\$3,246,024
Limestone	-	-	-	-	-	-	712,964	10,580,495
Re-emission Chemical	-	-	-	-	-	-	-	117,168
Sorbents	-	-	-	-	-	-	186,698	3,740,037
Urea	-	-	-	-	-	-	120,649	1,028,737
Total	-	-	-	-	17,614	-	1,204,076	18,712,460

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
December 2016

Schedule 6
Page 1 of 3

Description	Weatherspoon	Lee	Sutton	Robinson	Asheville
Coal Data:					
Beginning balance	-	-	-	-	123,484
Tons received during period	-	-	-	-	45,477
Inventory adjustments	-	-	-	-	-
Tons burned during period	-	-	-	-	67,832
Ending balance	-	-	-	-	101,129
MBTUs per ton burned	-	-	-	-	24.80
Cost of ending inventory (\$/ton)	-	-	-	-	46.97
Oil Data:					
Beginning balance	605,030	-	3,170,078	78,040	3,089,195
Gallons received during period	90,284	-	-	-	847,972
Miscellaneous use and adjustments	(121)	-	-	-	(9,217)
Gallons burned during period	13,530	-	773	-	813,167
Ending balance	681,663	-	3,169,305	78,040	3,114,783
Cost of ending inventory (\$/gal)	2.11	-	2.80	2.81	1.91
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	4,240,682	2,855,771	-	19,673
MCF burned during period	-	4,240,682	2,855,771	-	19,673
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	-	16,995
Tons received during period	-	-	-	-	2,064
Inventory adjustments	-	-	-	-	(3,393)
Tons consumed during period	-	-	-	-	3,855
Ending balance	-	-	-	-	11,811
Cost of ending inventory (\$/ton)	-	-	-	-	45.83

Notes:

Detail amounts may not add to totals shown due to rounding.

Schedule excludes in-transit, terminal and tolling agreement activity.

Gas is burned as received; therefore, inventory balances are not maintained.

The oil inventory data for Wayne reflects the common usage of the oil tank used for both Wayne and Lee units.

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
December 2016

Schedule 6
Page 2 of 3

Description	Roxboro	Mayo	Brunswick	Blewett	Wayne County
Coal Data:					
Beginning balance	1,089,214	350,746	-	-	-
Tons received during period	297,809	163,911	-	-	-
Inventory adjustments	(41,327)	(13,595)	-	-	-
Tons burned during period	163,809	43,987	-	-	-
Ending balance	1,181,887	457,075	-	-	-
MBTUs per ton burned	25.66	25.35	-	-	-
Cost of ending inventory (\$/ton)	82.81	81.51	-	-	-
Oil Data:					
Beginning balance	452,317	295,411	166,486	806,838	11,851,575
Gallons received during period	248,489	98,125	9,837	-	-
Miscellaneous use and adjustments	(7,555)	(3,262)	-	-	-
Gallons burned during period	244,268	124,935	7,056	-	160,321
Ending balance	448,983	265,339	169,267	806,838	11,691,254
Cost of ending inventory (\$/gal)	1.56	1.65	2.81	2.34	2.48
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	-	-	-	-	69,443
MCF burned during period	-	-	-	-	69,443
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	85,879	21,376	-	-	-
Tons received during period	28,573	5,560	-	-	-
Inventory adjustments	(6,952)	-	-	-	-
Tons consumed during period	11,553	2,321	-	-	-
Ending balance	95,947	24,615	-	-	-
Cost of ending inventory (\$/ton)	35.47	35.20	-	-	-

Duke Energy Progress
Fuel & Fuel-related Consumption and Inventory Report
December 2016

Schedule 6
Page 3 of 3

Description	Darlington	Smith Energy Complex	Harris	Current Month	Total 12 ME December 2016
Coal Data:					
Beginning balance	-	-	-	1,563,444	2,041,259
Tons received during period	-	-	-	507,197	4,532,402
Inventory adjustments	-	-	-	(54,922)	36,131
Tons burned during period	-	-	-	275,628	4,869,701
Ending balance	-	-	-	1,740,091	1,740,091
MBTUs per ton burned	-	-	-	25.40	25.12
Cost of ending inventory (\$/ton)	-	-	-	80.39	80.39
Oil Data:					
Beginning balance	10,080,923	7,846,270	282,376	38,724,539	38,485,665
Gallons received during period	-	297,548	-	1,592,255	9,673,225
Miscellaneous use and adjustments	-	-	-	(20,155)	(299,048)
Gallons burned during period	82,826	289	-	1,447,165	9,010,368
Ending balance	9,998,097	8,143,529	282,376	38,849,474	38,849,474
Cost of ending inventory (\$/gal)	2.44	2.32	2.81	2.40	2.40
Gas Data:					
Beginning balance	-	-	-	-	-
MCF received during period	25,240	6,004,460	-	13,215,269	170,537,344
MCF burned during period	25,240	6,004,460	-	13,215,269	170,537,344
Ending balance	-	-	-	-	-
Limestone/Lime Data:					
Beginning balance	-	-	-	124,250	167,580
Tons received during period	-	-	-	36,197	278,776
Inventory adjustments	-	-	-	(10,345)	(10,250)
Tons consumed during period	-	-	-	17,729	303,733
Ending balance	-	-	-	132,373	132,373
Cost of ending inventory (\$/ton)	-	-	-	36.34	36.34

DUKE ENERGY PROGRESS
ANALYSIS OF COAL PURCHASED
DECEMBER 2016

STATION	TYPE	QUANTITY OF TONS DELIVERED	DELIVERED COST	DELIVERED COST PER TON
ASHEVILLE	SPOT	-	\$ -	-
	CONTRACT	45,477	3,168,212	69.67
	ADJUSTMENTS	-	101,088	-
	TOTAL	45,477	3,269,300	71.89
MAYO	SPOT	-	-	-
	CONTRACT	163,911	12,463,953	76.04
	ADJUSTMENTS	-	104,522	-
	TOTAL	163,911	12,568,474	76.68
ROXBORO	SPOT	12,899	896,551	69.50
	CONTRACT	284,910	22,058,714	77.42
	ADJUSTMENTS	-	816,493	-
	TOTAL	297,809	23,771,757	79.82
ALL PLANTS	SPOT	12,899	896,551	69.50
	CONTRACT	494,298	37,690,878	76.25
	ADJUSTMENTS	-	1,022,103	-
	TOTAL	507,197	\$ 39,609,532	\$ 78.09

DUKE ENERGY PROGRESS
ANALYSIS OF COAL QUALITY RECEIVED
DECEMBER 2016

STATION	PERCENT MOISTURE	PERCENT ASH	HEAT VALUE	PERCENT SULFUR
ASHEVILLE	6.33	10.45	12,360	1.72
MAYO	6.49	7.69	12,877	2.47
ROXBORO	6.50	9.24	12,578	1.87

**DUKE ENERGY PROGRESS
ANALYSIS OF OIL PURCHASED
DECEMBER 2016**

	ASHEVILLE	BRUNSWICK	MAYO
VENDOR	Charlotte Tank Farm and Indigo	Selma Tank Farm	Charlotte Tank Farm and Greensboro Tank Farm
SPOT/CONTRACT	Contract	Contract	Contract
SULFUR CONTENT %	0	0	0
GALLONS RECEIVED	847,972	9,837	98,125
TOTAL DELIVERED COST	\$ 1,492,747	\$ 25,591	\$ 178,948
DELIVERED COST/GALLON	\$ 1.76	\$ 2.60	\$ 1.82
BTU/GALLON	138,000	138,000	138,000
	ROXBORO	SMITH ENERGY COMPLEX	WEATHERSPOON
VENDOR	Charlotte Tank Farm and Greensboro Tank Farm	Indigo	Petroleum Traders
SPOT/CONTRACT	Contract	Contract	Contract
SULFUR CONTENT %	0	0	0
GALLONS RECEIVED	248,489	297,548	90,284
TOTAL DELIVERED COST	\$ 441,162	\$ 509,097	\$ 154,833
DELIVERED COST/GALLON	\$ 1.78	\$ 1.71	\$ 1.71
BTU/GALLON	138,000	138,000	138,000

Note:

Price adjustments of \$(3,558) and \$(983) for the Harris and Robinson stations, respectively, are excluded.

Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
January, 2016 - December, 2016
Nuclear Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Brunswick 1	7,313,545	938	88.76	88.74
Brunswick 2	8,075,179	932	98.64	99.27
Harris 1	7,513,051	928	92.17	90.22
Robinson 2	6,432,188	741	98.82	96.45

Brunswick 1 Equivalent Availability (%) and Brunswick 2 Net Generation (mWh) includes prior period true ups.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
January, 2016 through December, 2016
Combined Cycle Units**

Unit Name		Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Lee Energy Complex	1A	1,293,456	196	75.09	85.68
Lee Energy Complex	1B	1,304,811	195	76.14	89.52
Lee Energy Complex	1C	1,321,557	197	76.27	89.71
Lee Energy Complex	ST1	2,482,426	378	74.68	83.01
Lee Energy Complex	Block Total	6,402,250	967	75.38	86.12
Richmond County CC	7	988,408	172	65.40	73.53
Richmond County CC	8	980,652	170	65.56	73.33
Richmond County CC	ST4	1,118,533	169	75.28	73.19
Richmond County CC	9	1,381,401	193	81.50	88.96
Richmond County CC	10	1,394,247	193	82.26	88.88
Richmond County CC	ST5	1,821,922	248	83.52	87.42
Richmond County CC	Block Total	7,685,163	1,146	76.36	81.90
Sutton Energy Complex	1A	1,444,793	198	83.03	95.75
Sutton Energy Complex	1B	1,476,393	198	84.84	97.02
Sutton Energy Complex	ST1	1,797,795	265	77.16	95.81
Sutton Energy Complex	Block Total	4,718,981	662	81.22	96.02

Units in commercial operation for the full month are presented.
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
January, 2016 through December, 2016**

Intermediate Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Mayo 1	2,009,522	735	31.13	87.97
Roxboro 3	2,239,706	694	36.74	93.17
Roxboro 4	2,176,191	703	35.22	93.65

Units in commercial operation for the full month are presented.
Pre-commercial or partial month commercial operations are not included.

Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
January, 2016 through December, 2016

Baseload Steam Units

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Equivalent Availability (%)
Roxboro 2	2,850,976	672	48.31	89.22

Units in commercial operation for the full month are presented.
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
January, 2016 through December, 2016
Other Cycling Steam Units**

Unit Name	Net Generation (mWh)	Capacity Rating (mW)	Capacity Factor (%)	Operating Availability (%)
Asheville 1	725,541	190	43.42	81.33
Asheville 2	585,777	190	35.05	80.10
Roxboro 1	1,045,182	379	31.36	98.35

Units in commercial operation for the full month are presented.
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data
Twelve Month Summary
January, 2016 through December, 2016
Combustion Turbine Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Asheville CT	205,870	343	91.75
Blewett CT	-73	59	98.97
Darlington CT	114,391	808	91.27
Richmond County CT	2,973,077	837	90.28
Sutton CT	-521	67	91.98
Wayne County CT	556,236	903	92.24
Weatherspoon CT	374	143	97.24

Units in commercial operation for the full month are presented.
Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress
Power Plant Performance Data**

Schedule 10
Page 7 of 7

**Twelve Month Summary
January, 2016 through December, 2016
Hydroelectric Stations**

Station Name	Net Generation (mWh)	Capacity Rating (mW)	Operating Availability (%)
Blewett	72,415	27.0	69.93
Marshall	8,677	4.0	46.27
Tillery	152,384	84.0	95.12
Walters	256,429	113.0	96.82